

INTRODUCTORY COMMENTS

This is in response to the non-final Office Action dated April 24, 2009, for which a response is due on July 24, 2009. Accordingly, this response is timely filed. Reconsideration and allowance of the pending claims, as amended, in light of the remarks presented herein are respectfully requested.

Amendments to the Claims are reflected in the listing of claims which begins on page 3 of this paper.

Remarks/Arguments begin on page 7 of this paper.

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings of claims in the application:

Claims 1-15 (cancelled)

Claim 16 (currently amended): A carrier and drive arrangement for use in a solar energy reflector system and which comprises:

a) a carrier structure having

i) a reflector element,

[[i)]ii) a platform for supporting [[a)]the reflector element,

[[ii)]iii) a frame portion that includes hoop-like end members between which the platform extends, wherein the frame portion comprises a space frame, and wherein each of the hoop-like end members has a channel-section circumferential portion, and

[[iii)]iv) support members which support the frame portion by way of the end members and which accommodate turning of the carrier structure about an axis of rotation that is substantially coincident with a longitudinal axis of the reflector element when supported by the platform, wherein the support members comprise spaced-apart supporting rollers which track within the circumferential portion of associated ones of the end members; and

b) a drive system incorporating an electric motor for imparting turning drive to the carrier structure.

Claim 17 (previously presented): The carrier and drive arrangement as claimed in claim 16 wherein the drive system is arranged to impart unidirectional turning drive to the carrier structure by way of one of the end members.

Claim 18 (currently amended): The carrier and drive arrangement as claimed in claim [[17]] 16 wherein the drive system comprises:

a link chain that extends around and is fixed to the end member to form, in effect, a gear wheel, and

b) a sprocket for transferring drive from the electric motor to the link chain.

Claim 19 (previously presented): The carrier and drive arrangement as claimed in claim 16 wherein the platform comprises a panel-like platform which is formed with stiffening elements in the form of corrugations and wherein the reflector element is supported upon the crests of the corrugations.

Claim 20 (previously presented): The carrier and drive arrangement as claimed in claim 16 wherein the platform comprises a panel-like platform which is formed with stiffening elements in the form of flutes and wherein the reflector element is supported upon the crests of the flutes.

Claim 21 (previously presented): The carrier and drive arrangement as claimed in claim 19 wherein the stiffening elements are orientated to extend in a direction parallel to the longitudinal axis of the reflector element.

Claim 22 (previously presented): The carrier and drive arrangement as claimed in claim 20 wherein the stiffening elements are oriented to extend in a direction parallel to the longitudinal axis of the reflector element.

Claim 23 (previously presented): The carrier and drive arrangement as claimed in claim 16 wherein the platform is curved concavely in a direction orthogonal to the longitudinal axis of the reflector element.

Claim 24 (previously presented): The carrier and drive arrangement as claimed in claim 23 wherein the platform is curved with a radius of curvature within the range of 20 to 50 metres.

Claim 25 (previously presented): The carrier and drive arrangement as claimed in claim 23 wherein the reflector element is secured to the platform in a manner such that the curvature of the platform is imparted to the reflector element.

Claim 26 (previously presented): The carrier and drive arrangement as claimed in claim 16 wherein the reflector element comprises a panel-shaped glass mirror.

Claim 27 (previously presented): The carrier and drive arrangement as claimed in claim 16 wherein the reflector element comprises a plurality of edge-abutting glass mirrors.

Claim 28 (previously presented): The carrier and drive arrangement as claimed in claim 26 wherein the reflector element is adhered to the platform.

Claim 29 (currently amended): The carrier and drive arrangement as claimed in claim 16 wherein each of the hoop-~~[[shaped]]~~like end members has ~~a channel-section circumferential portion and~~ a diametrically extending member that is constituted by a transverse frame member ~~of the platform.~~

Claim 30 (canceled)

Claim 31 (new): The carrier and drive arrangement as claimed in claim 29, wherein the transverse frame members are curved.

Claim 32 (new): The carrier and drive arrangement as claimed in claim 31, wherein the platform is secured to the transverse frame members in a manner such that the curvature of the transverse frame members are imparted to the platform, and wherein the reflector element is secured to the platform in a manner such that the curvature of the platform is imparted to the reflector element.

Claim 33 (new): The carrier and drive arrangement as claimed in claim 29, wherein the space frame comprises struts connecting opposite end regions of each of the transverse frame members to a spine member.

Claim 34 (new): The carrier and drive arrangement as claimed in claim 33, wherein the spine member interconnects the end members.

Claim 35 (new): The carrier and drive arrangement as claimed in claim 16, wherein the support members further comprise a hold-down roller which prevents the lifting of the end members.

Claim 36 (new): The carrier and drive arrangement as claimed in claim 16, wherein the end members extend about the axis of rotation of the carrier structure, and wherein the platform extends in a longitudinal direction between the end members.

Claim 37 (new): The carrier and drive arrangement as claimed in claim 16, wherein two or more carrier structures are positioned linearly in a row and are connected to one another by way of adjacent ones of the end members.

Claim 38 (new): The carrier and drive arrangement of claim 37, wherein the drive system drives the row of two or more carrier structures by way of at least one of the end members.